



HPN related costs accounted for the majority of the total expenses in IF patients. The costs declined after the first year due to a reduction in complications and hospital admissions” Canovaiet al (2018).

Abstract:

**BACKGROUND & AIMS:** Chronic intestinal failure is a complex medical condition which is associated with high costs. These patients require long-term home parenteral nutrition (HPN) and costs are compounded by frequent admissions for the underlying disease and HPN. However, it is unknown what the specific costs subdivisions are and how they evolve over time. The aim of the study was to evaluate the cost dynamics of HPN care in a cohort of stable, long-term intestinal failure patients.

**METHODS:** A retrospective analysis of our single-center long-term (>2 years), benign HPN population was performed. All relevant clinical and financial data were collected: costs of hospital admissions, diagnostics, treatments, out-patient clinics, home care, medication, materials and HPN education. The costs were tabulated and assigned by cause (HPN related, underlying disease-related or -unrelated). Patients with complicated intestinal failure (defined as impending loss of vascular access, liver failure or recurrent fluid/electrolyte disorders) were excluded. Data are presented as median (range).

**RESULTS:** Thirty-seven patients (24 female; age  $58.6 \pm 13.3$  years) were included in the

study. HPN duration was 5.3 years (2.1-15.1) at 4.3 infusion days per week (1.5-7). Total cost of the first HPN year was €83,503 (35,364-256,780). HPN-related costs accounted for 69% (€57,593) vs 27% for underlying disease-related costs (€22,505) and 4% for disease-unrelated costs (€3065). HPN complications cost €16,077 in the first year and accounted for 31% of HPN costs. The total cost dropped by 15% in the second year to €71,311. This reduction was due to fewer hospital admissions and fewer HPN complications. This trend continued and by year 5 the annual cost was 40% cheaper compared to year 1 (€58,187 vs €83,503).

**CONCLUSIONS:** HPN related costs accounted for the majority of the total expenses in IF patients. The costs declined after the first year due to a reduction in complications and hospital admissions.

#### Reference:

Canovai, E., Ceulemans, L.J., Peers, G., De Pourcq, L., Pijpops, M., De Hertogh, G., Hiele, M., Pirenne, J. and Vanuytsel, T. (2018) Cost analysis of chronic intestinal failure. *Clinical Nutrition*. August 2nd. .

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